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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Madhavi W. Chandra

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EXAMINER

PATEL, CHIRAG R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/600,157	Applicant(s) CHANDRA ET AL.	
	Examiner CHIRAG R. PATEL	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10,12-27,29-37 and 39-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10,12-27,29-37 and 39-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 14, 2007 has been entered.

Response to Arguments

Applicant's arguments filed December 14, 2007 have been fully considered but they are not persuasive. A discussion is provided below and in the body of the claims. Examiner notes that claims 4, 11, 28 and 38 are cancelled by the applicants.

Madour discloses the serving PDSN releasing resources or data sessions when the disconnect request message is received per Col 3 line 63 – Col 4 line 4, “According to the exemplary preferred embodiment of the invention, the PDSN signals the HMA/PPS with a PrepaidAccountingCapability (PPAC) parameter indicative of the PDSN's own capacity for supporting prepaid service, and with a Session Termination Capability (STC) parameter indicative of the ability of the serving PDSN to disconnect data sessions based on a request provided by a remote authorized node, such as a Home Agent (HA) or the HAAA/PPS.”

Madour discloses storing information or resource management associated with the node in resources associated with the PDSN per Col 4 lines 17-30, "the data session can be stopped at the HA only, while the serving PDSN continue to perform off-line accounting for IP traffic that is blocked by the HA."

In response to claims 17, 30 and 40, Shaked discloses per ([0092], "These AAA messages may report information such as the event type (connect, disconnect), the network address assigned to user 101 the authenticated username, the caller ID received on the phone line, and technical information such as the bit rate of the connection, communication protocol, etc." In response to claims 18, 20, and 41, Moller discloses per [0090], and [0091], that "NACK, This message is a no-acknowledge and includes an error code."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-10, 12-16, 21-27, 29, 31-37, 39, and 42-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. – hereinafter Madour (US 6,970,693) in view of Grabelsky et al. – hereinafter Grabelsky (US 2004/0003046)

As per claims 1 and 42-44, Madour discloses in a PDSN, a method of releasing resources, comprising:

sending an access request message to a first AAA server for authentication of a node; (Col 2 lines 20-31; Col 5 line 62 – Col 6 line 24)

receiving an access accept message from the first AAA server; (Col 6 lines 25-61; Fig. 4)

establishing a Mobile IP session as a Foreign Agent for the node when an access accept message is received from the first AAA server; (Col 6 lines 25-61)

storing information associated with the node in resources associated with the PDSN; (Col 4 lines 17-30)

receiving a disconnect request message; and (Fig 5: item 526)

releasing the resources when the disconnect request message is received. (Col 3 line 63 – Col 4 line 4)

Madour fails to disclose wherein the resources comprise memory and the information comprises PPP information associated with a PPP session. Grabelsky discloses wherein the resources comprise memory and the information comprises PPP information associated with a PPP session. ([0092])

In reference to *KSR International Co. v. Teleflex Inc.*, 550 U.S. -, 82 USPQ2d 1385 (2007), it would have yielded predictable results to one of ordinary skill in the art at the time of the invention to combine prior art elements to implement PPP in the disclosure of Madour in use as a protocol in Mobile IP as it is well known to use of typical wireless infrastructure components. Madour discloses per Col 5 line 65 – Col 6 line 24,” Shown

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in FIG. 4 is a serving PDSN 400 that serves a prepaid user's mobile station (not shown), a Home Agent (HA) 402 of the prepaid user, and an HAAA/PPS server 200 as described hereinbefore (note that the HAAA/PPS may alternatively be an HAAA server). The serving PDSN 400 receives a Mobile IP (MIP) Registration Request (RRQ) 406 from a prepaid user". Grabalsky et al. discloses per [0092], "In FIG. 9, PPP connections 902 and 908 from the mobile terminals 936 and 938 terminate at packet data serving nodes (PDSN) 904 and 906. In 3G networks, mobile IP may be used to provide user terminal mobility while maintaining an always on IP connection to a network 918 such as an IP network."

As per claim 2, Madour discloses the method as recited in claim 1, wherein the disconnect request message is received from the first AAA server. (Fig. 5: item 526)

As per claim 3, Madour discloses the method as recited in claim 1, wherein the disconnect request message is received from a second AAA server via the first AAA server. (Col 1 lines 31-61)

As per claim 5, Madour discloses the method as recited in claim 1, wherein the resources comprise memory and the information is associated with the Mobile IP session. (Col 5 line 62 – Col 6 line 24)

As per claim 6, Madour discloses the method as recited in claim 1, wherein the disconnect request message is received from the first AAA server. (Col 3 line 63 – Col 4 line 4)

As per claim 7, Madour discloses the method as recited in claim 3, wherein the first AAA server is a visited AAA server associated with a foreign network and the second AAA server is a home AAA server associated with a home network of the node. (Col 1 lines 31-61; Figure 1)

As per claims 8 and 36, Madour discloses The method as recited in claim 3, wherein the first AAA server is a visited AAA server associated with a foreign network and the second AAA server is the visited AAA server associated with the foreign network. (Col 1 lines 31-61)

As per claim 9, Madour discloses the method as recited in claim 3, wherein the access request message and access reply message are RADIUS messages, and the first and second AAA servers are RADIUS servers. (Col 1 line 60 – Col 2 line 9)

As per claims 10, 27, and 37, Madour discloses the method as recited in claim 1, wherein the disconnect request message comprises a source PDSN identifier identifying the PDSN, a username identifier identifying a user

associated with the Mobile IP session, and a session identifier identifying a session associated with the user to be terminated by the PDSN. (Col 6 lines 25-61)

As per claim 12, Madour discloses the method as recited in claim 3, wherein the disconnect request message is triggered by a second access request message sent to the second AAA server by a second PDSN to which the node has roamed. (Col 1 lines 31-61)

As per claim 13, Madour discloses The method as recited in claim 12, wherein the disconnect request message is sent after an access accept message is sent by the second AAA server to the first AAA server. (Col 1 lines 31-61)

As per claim 14, Madour discloses the method as recited in claim 12, wherein the access request message and the second access request message each comprise a RADIUS access request message including a username identifier identifying a user associated with the Mobile IP session, a session identifier identifying a session associated with the user, and a PDSN identifier identifying the PDSN. (Col 1 line 60 – Col 2 line 9)

As per claims 15, 29, and 39, Madour discloses the method as recited in claim 1, further comprising: sending a disconnect acknowledgement message

indicating that the PDSN has successfully disconnected the user. (Col 6 line 62 – Col 7 line 12; Figure 5: item 536)

As per claim 16, Madour discloses The method as recited in claim 15, wherein the disconnect acknowledgement message is sent to the first AAA server. (Col 6 line 62 – Col 7 line 12; Figure 5: item 536, happens after Figure 5: item 534)

As per claims 21, 31, and 45-48, Madour discloses in a AAA server, a method of initiating the release of resources in a first PDSN, comprising: receiving an access request message from a second PDSN, the access request message including a username identifier identifying a user, a session identifier identifying a session associated with the user, and a PDSN identifier identifying the first PDSN; (Col 5 line 62 – Col 6 line 64)

sending an access accept message to the second PDSN in response to the access request message; (Col 6 lines 25-61; Figure 4)

and sending a disconnect request message to the first PDSN indicating a request to release resources associated with the session. (Fig. 5: item 526)

As per claims 22 and 32, Madour discloses the method as recited in claim 21, wherein the disconnect request message further indicates that the resources associated with the session are no longer needed. (Fig. 5: item 534)

As per claims 23 and 33, Madour discloses the method as recited in claim 21, wherein the disconnect request message further indicates that a node associated with the user has moved. (Col 1 lines 31-61)

As per claims 24 and 34, Madour discloses the method as recited in claim 23, wherein the node is a mobile node. (Col 4 lines 5-16)

As per claims 25 and 35, Madour discloses the method as recited in claim 21, wherein the disconnect request message requests that the first PDSN disconnect the user for the session identified by the session identifier. (Col 6 lines 25-61)

As per claim 26, Madour discloses the method as recited in claim 21, wherein the AAA server is a home AAA server associated with a home network of the user. (Col 1 lines 31-61)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 30, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour (US 6,970,693) in view of Shaked et al. – hereinafter Shaked (US 2002/0007411).

As per claims 17, 30, and 40, Madour discloses the method as recited in claim 3. Madour fails to disclose sending a disconnect acknowledgement message to the second AAA server, the disconnect acknowledgement message indicating that the PDSN has successfully disconnected the user. Shaked discloses sending a disconnect acknowledgement message to the second AAA server, the disconnect acknowledgement message indicating that the PDSN has successfully disconnected the user. ([0091]-[0092]) In reference to KSR International Co. v. Teleflex Inc., 550 U.S. -, 82 USPQ2d 1385 (2007), it would have yielded predictable results to one of ordinary skill in the art at the time of the invention to combine prior art elements to implement messages to indicating the PDSN has successfully disconnected the user in the PDSN of Madour to provide notification of disconnect and connect events in response to the actions performed by PDSN of Madour in the context of (Col 3 line 63 – Col 4 line 4) “with a Session Termination Capability (STC) parameter indicative of the ability of the serving PDSN to disconnect data sessions based on a request provided by a remote authorized node, such as a Home Agent (HA) or the HAAA/PPS.”

Claims 18-20, and 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madour (US 6,970,693) in view of Moller et al. – hereinafter Moller (US 2003/0028598)

As per claims 18, 20, and 41, Madour discloses the method as recited in claim 1. Madour fails to disclose sending a disconnect non-acknowledgement message indicating that the PDSN is unable to disconnect the user. Moller discloses sending a disconnect non-acknowledgement message indicating that the PDSN is unable to disconnect the user. ([0090]-[0091]) In reference to KSR International Co. v. Teleflex Inc., 550 U.S. -, 82 USPQ2d 1385 (2007), it would have yielded predictable results to one of ordinary skill in the art at the time of the invention to combine prior art elements to implement messages to indicating the PDSN has unsuccessfully disconnected the user in the PDSN of Madour to provide an error codes in response to the actions performed by PDSN of Madour in the context of (Col 3 line 63 – Col 4 line 4) “with a Session Termination Capability (STC) parameter indicative of the ability of the serving PDSN to disconnect data sessions based on a request provided by a remote authorized node, such as a Home Agent (HA) or the HAAA/PPS.”

As per claim 19, Madour / Moller disclose the method of claim 18. Madour fails to disclose non-acknowledgement message is sent to the first AAA server. Moller discloses sending a non-acknowledgement message ([0090]. In reference to KSR International Co. v. Teleflex Inc., 550 U.S. -, 82 USPQ2d 1385 (2007), it would have yielded predictable results to one of ordinary skill in the art at the time of the invention to

combine prior art elements to implement messages to indicating the PDSN has unsuccessfully disconnected the user in the PDSN of Madour to provide an error codes in response to the actions performed by PDSN of Madour in the context of (Col 3 line 63 – Col 4 line 4) “with a Session Termination Capability (STC) parameter indicative of the ability of the serving PDSN to disconnect data sessions based on a request provided by a remote authorized node, such as a Home Agent (HA) or the HAAA/PPS.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag R Patel whose telephone number is (571)272-7966. The examiner can normally be reached on Monday to Friday from 7:30AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

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(toll free).

/C. R. P./

Examiner, Art Unit 2141

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145